

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**In the application of :** O'CONNOR, Neil et al.  
**Serial No. :** 10/723,507  
**Filed :** November 26, 2003  
**For :** Method and system for distributing contacts within a network  
**Examiner :** Chirag R. Patel  
**Art Unit :** 2141  
**Customer No. :** 23644

**BRIEF ON APPEAL**

Honorable Director of Patents and Trademarks  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This Appeal is from the Examiner's final Office Action dated May 1, 2008 in which claims 1 and 3-43 of this application were finally rejected. A Notice of Appeal was filed September 30, 2008.

The fee of \$540.00 pursuant to 37 C.F.R. §41.20(b)(2) for this brief should be deducted from Deposit Account No. 12-0913. A necessary Petition for Extension of Time is also being submitted herewith to cover the needed one month extension.

**(i) REAL PARTY IN INTEREST**

The Assignee, Nortel Networks Limited, is the real party in interest in the pending appeal.

**(ii) RELATED APPEALS AND INTERFERENCES**

Applicants are unaware of any other appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(iii) STATUS OF CLAIMS**

Claims 1 and 3-43 are pending in the Application, are finally rejected, and are the claims that are being appealed. Claim 2 has been canceled.

Claims 1 and 3-43 are set forth in the Claims Appendix.

**(iv) STATUS OF AMENDMENTS**

No claim amendments have been filed subsequent to the final rejection dated May 1, 2008. A response with no amendments was filed, with extension, on August 27, 2008 and was entered.

**(v) SUMMARY OF CLAIMED SUBJECT MATTER**

Independent claim 1 relates to a method of distributing a contact across a network (page 1, lines 8-13; page 15, lines 16-24, and shown in the flowchart of Fig. 3 generally) having a number of nodes which are equipped to service contacts (page 15, lines 16-20), comprising the steps of:

- a) generating a contact information entity which is accessible across the network (page 16, lines 15-29) and which comprises information sufficient to enable each node to determine whether it has the resources to service the contact (page 16, lines 22-24; page 17, lines 13-17), one or more of said nodes being a contact center having a plurality of agents for servicing contacts (Figs. 1 & 2; page 13, lines 9-12; page 15, lines 16-20), each agent having identified skills (page 13, lines 10-12), whereby said contact center can determine whether its

agents can service a given contact, based on said contact information entity and the identified skills of the contact center's agents (page 16, lines 6-8; page 17, lines 1-11);

- b) assessing one or more bids issued by one or more nodes to determine a bid to be used in assigning the contact (page 19, lines 6-11); and
- c) on the basis of said determination, assigning said contact to the node which issued said bid (page 19, lines 22-28).

Independent claim 19 relates to a method of obtaining contacts across a network from a contact source, comprising the steps, carried out by a contact center having a plurality of agents for servicing contacts, each agent having identified skills (page 12, lines 12-24; page 13, lines 9-12), of:

- a) receiving via the network contact information (page 17, lines 1-11) which comprises information sufficient to enable said contact center to determine whether it has the resources to service the contact (page 16, lines 22-24; page 17, lines 13-17);
- b) issuing a bid to the contact source offering to service the contact based on said information (page 18, lines 19-29); and
- c) in the event that the bid is successful (page 19, lines 22-23), receiving the contact from the contact source (page 19, lines 24-26; page 20, lines 1-13).

Independent claim 34 relates to a method of distributing contacts across a network having a plurality of connected contact centers (page 1, lines 8-13; page 15, lines 16-24), each contact center having a plurality of agents for servicing contacts, each agent having identified skills (page 15, lines 16-20), comprising the steps of:

- a) upon receipt of a contact by a contact centre, publishing information relating to the contact over the network (page 16, lines 15-29);
- b) awaiting one or more bids from remote contact centres offering to service the contact (page 16, line 29);
- c) determining from said bids a destination for the contact (page 19, lines 6-11); and

- d) forwarding the contact to said destination (page 19, lines 22-28).

Independent claim 37 relates to an apparatus (see Fig. 1 generally and in particular auctions manager 36 and contact manager 22) for distributing a contact across a network having a number of nodes which are equipped to service contacts (page 13, lines 20-22), comprising:

- a) a contact information generator for generating a contact information entity which is accessible across the network (page 16, lines 15-29) and which comprises information sufficient to enable each node to determine whether it has the resources to service the contact (page 16, lines 22-24; page 17, lines 13-17), one or more of said nodes being a contact center having a plurality of agents for servicing contacts (Figs. 1 & 2; page 13, lines 9-12; page 15, lines 16-20), each agent having identified skills (page 13, lines 10-12), whereby said contact center can determine whether its agents can service a given contact, based on said contact information entity and the identified skills of the contact center's agents (page 16, lines 6-8; page 17, lines 1-11);
- b) a bid assessment module (page 13, lines 24-25) for assessing one or more bids issued by one or more nodes to determine a bid to be used in assigning the contact (page 19, lines 6-11); and
- c) contact assignment means for, on the basis of said determination, assigning said contact to the node which issued said bid (page 19, lines 22-28).

Independent claim 38 relates to an apparatus for obtaining contacts across a network from a contact source, comprising:

- a) a network connection for receiving via the network contact information (page 15, lines 16-23);
- b) an evaluation module for evaluating said contact information to determine whether a node associated with said apparatus has the resources to service the contact (page 16, lines 22-24; page 17, lines 13-17), said node being a contact center having a plurality of agents for servicing contacts, each agent having identified skills (page 12, lines 12-24; page 13, lines 9-12),

whereby said evaluation module can determine whether the agents of the contact center can service said contact, based on said contact information entity and the identified skills of the contact center's agents (page 17, lines 14-16); and

c) a bid generation unit for issuing a bid to the contact source offering to service the contact based on said information (page 17, lines 23-26; page 18, lines 19-29).

Independent claim 39 relates to a contact centre (page 12, lines 12-14) comprising:

a) a network connection for distributing contacts to one or more other contact centres (page 12, lines 15-24; page 15, lines 25-26; page 16, lines 16-24; page 19, lines 22-28; page 20, lines 1-13);

b) a contact manager for controlling contacts received at the contact centre from one or more communications networks and distributing said contacts among a plurality of agents based on the requirements of the contact and identified skills of the agents (page 12, line 26 to page 13, line 12);

c) a contact information generator for generating a contact information entity which is accessible across the network and which comprises information sufficient to enable each node to determine whether it has the resources to service a contact (page 14, lines 15-19);

d) a bid assessment module for assessing one or more bids issued by one or more nodes to determine a bid to be used in assigning the contact (page 19, lines 6-11); and

e) contact assignment means for, on the basis of said determination, assigning said contact to the node which issued said bid (page 19, lines 22-28).

Independent claim 40 relates to a network having a plurality of connected contact centres (Fig. 2 and page 15, lines 16-23, wherein at least one of said contact centres comprises:

a) a network connection for distributing contacts to one or more other contact centres (page 12, lines 15-24; page 15, lines 25-26; page 16, lines 16-24; page 19, lines 22-28; page 20, lines 1-13);

b) a contact manager for controlling contacts received at the contact centre from one or more communications networks and distributing said contacts among a plurality of agents based on the requirements of the contact and identified skills of the agents (page 12, line 26 to page 13, line 12);

c) a contact information generator for generating a contact information entity which is accessible across the network and which comprises information sufficient to enable each node to determine whether it has the resources to service a contact (page 14, lines 15-19);

d) a bid assessment module for assessing one or more bids issued by one or more nodes to determine a bid to be used in assigning the contact (page 19, lines 6-11); and

e) contact assignment means for, on the basis of said determination, assigning said contact to the node which issued said bid (page 19, lines 22-28).

Independent claim 41 relates to a computer program product comprising instructions in machine readable form which when executed by a computer associated with a contact centre are effective to cause said computer to (page 12, lines 27-28):

a) generate a contact information entity which is accessible across the network (page 16, lines 15-29) and which comprises information sufficient to enable each node to determine whether it has the resources to service the contact (page 16, lines 22-24; page 17, lines 13-17), one or more of said nodes being a contact center having a plurality of agents for servicing contacts (Figs. 1 & 2; page 13, lines 9-12; page 15, lines 16-20), each agent having identified skills (page 13, lines 10-12), whereby said contact center can determine whether its agents can service a given contact, based on said contact information entity and the identified skills of the contact center's agents (page 16, lines 6-8; page 17, lines 1-11);

b) assess one or more bids issued by one or more nodes to determine a bid to be used in assigning the contact (page 19, lines 6-11); and

c) on the basis of said determination, assign said contact to the node which issued said bid (page 19, lines 22-28).

Independent claim 42 relates to a computer program product comprising instructions in machine readable form which when executed by a computer associated with a contact centre are effective to cause said computer to (page 12, lines 27-28):

- a) receive via the network contact information w(page 17, lines 1-11) which comprises information sufficient to enable said contact center to determine whether it has the resources to service the contact (page 16, lines 22-24; page 17, lines 13-17), said node being a contact center having a plurality of agents for servicing contacts, each agent having identified skills (page 12, lines 12-24; page 13, lines 9-12), whereby said evaluation module can determine whether the agents of the contact center can service said contact, based on said contact information entity and the identified skills of the contact center's agents (page 16, lines 6-8; page 17, lines 1-11);
- b) issue a bid to the contact source offering to service the contact based on said information (page 18, lines 19-29); and
- c) in the event that the bid is successful (page 19, lines 22-23), receive the contact from the contact source (page 19, lines 24-26; page 20, lines 1-13).

Independent claim 43 relates to a data carrier encoded with a machine-readable computer software object (page 3, lines 24-30; page 13, line 29 to page 14, line 12; page 20, lines 20-22; page ), said computer software object encoding contact information and comprising:

- a) information identifying a node which controls the contact (page 16, lines 22-23);
- b) information identifying one or more characteristics of the contact, whereby said contact may be matched with an agent of a contact center having identified skills to service said contact (page 16, lines 22-24; page 17, lines 14-19); and
- c) information identifying one or more parameters for which bids are sought by said node, such that a different node may bid to have control of the contact transferred to it (page 16, lines 24-27).

**(vi) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

There are three grounds of rejection:

- 1) Whether claims 1, 3-10, 12-22, 26-30 and 32-43 are unpatentable under 35 U.S.C. 102(e) as being anticipated by Benjamin US Patent No. 7,072,966 (hereinafter "Benjamin").
- 2) Whether claims 11 and 31 are unpatentable under 35 U.S.C. 103 over Benjamin in view of Klein US Patent No. 6,934,381 (hereinafter "Klein").
- 3) Whether claims 23-25 are unpatentable under 35 U.S.C. 102(e) over Benjamin in view of Rowstron US Patent no. 6,751,619 (hereinafter "Rowstron").



## (vii) ARGUMENT

### 1) Rejection under 35 U.S.C. 102(e) over Benjamin.

As a preliminary matter, the summary of this rejection, at page 2 of the Final Office Action dated May 1, 2008, listed claims 1, 3-19, 12-22, etc. It is assumed that the number "19" was a typographical error which should have been "10", based on the remaining content of the rejection (for example, no rejection is made under this heading against claim 11).

#### Grouping of claims

In the final office action, each of independent claims 1, 19, 34, 37, 38, 39, 40, 41, 42 and 43 was treated as being part of a group. Appellants argued at page 3 of the response filed on August 27, 2008, that this was improper and that, given the significant differences in subject-matter between (say) claim 1 and claim 19, it was not even possible to determine how the rejection as written for claim 1 could be understood as applying to claim 19.

The independent claims can be grouped as follows:

- (a) Claims 1, 37, 39 & 41: Method, apparatus, contact center and computer program product claims relating to the distribution of the contact, defined in terms of the node or contact center carrying out the distribution.
- (b) Claims 19, 38 & 42: Method, apparatus and computer program product claims relating to the submission of bids by nodes and the consequent receipt of contacts.
- (c) Claim 34: Method and network claims relating to the distribution steps as applying to the entire network of contact centers.
- (d) Claim 40: Network claim defined in terms of a plurality of contact centers as claimed in claim 41.

(e) Claim 43: Data carrier encoded with functional descriptive material, namely the contact information software object.

Appellants submit that these independent claims do not all stand or fall together as the Examiner has argued. Appellants submit that the five groups of independent claims set out as (a) to (e) above ought to be considered separately from one another.

The primary reason is that the Benjamin reference, relied on to reject all claims, *prima facie* contains no mention whatsoever of the transfer of contacts from one contact center to other nodes, or of any networked mode of operation, or of any issuing of bids across a network, or of the transfer of contacts in response to such bids.

Accordingly, since claims 1, 37, 39 and 41 related to activities of the distributing contact center, while claims 19, 34, 38, 40, 42 and 43 all recite steps or features which relate to other nodes of a network of contact centers, it can be readily seen that there is a very clear reason not to commonly reject all such claims based on a reference (such as Benjamin) which only discusses a single contact center.

This argument, which was made in the response filed on August 27, 2008, was not addressed at all in the Advisory Action dated September 12.

(a) Claims 1, 3-18, 37, 39 and 41

*1<sup>st</sup> Argument:*

Claim 1 requires the distribution of a contact across a network having a number of nodes which are equipped to service contacts, at least one node being a contact center having a plurality of agents for servicing contacts, each agent having identified skills.

The Benjamin reference falls at this very first hurdle. It does not disclose distributing contacts across a network having a number of nodes which are each equipped to service contacts.

The Final Office Action provided no argument as to why the Benjamin reference could be considered to read onto this requirement of the claim. In the response dated August 27, 2008, it was pointed out:

"Claim 1 requires a network having a number of nodes which are equipped to service contacts, ... one or more of the nodes being a contact center having a plurality of agents for servicing contacts. The newly cited Benjamin reference contains no such disclosure and is solely concerned with routing a contact within a single contact center."

The Advisory Action dated September 12 failed to address this argument and failed to provide any indication of where Benjamin might be supposed to disclose a contact center forming part of a network of nodes equipped to handle contacts and to distribute such contacts among the nodes.

For this reason, claims 1, 3-18, 37, 39 and 41 are not anticipated by Benjamin.

*2<sup>nd</sup> Argument:*

Claim 1 requires the step of generating a contact information entity which is accessible across the network and which comprises information sufficient to enable each node to determine whether it has the resources to service the contact. Benjamin is silent as regards generating any such contact information entity or making such an entity accessible across the network.

Benjamin is concerned solely with handling a contact within a single contact center and with choosing an agent from among those available to that contact center (see for instance Benjamin, col. 1, lines 26-33, Figs. 1 and 2). Benjamin fails to disclose any interaction with other network nodes. Benjamin contains no disclosure of a contact information entity, accessible across a

network and comprising information sufficient to enable network nodes to determine whether they have the resources to service the contact.

In the Final Office Action of May 1, 2008, the passage cited against this feature of generating a contact information entity accessible across the network was col. 7, lines 26-46 and Figure 6 of Benjamin. The col. 7 passage is concerned with updating a skills table, i.e. a table of service agent skills (see col. 7, lines 1-4 and lines 40-44).

The relevance of this passage to the feature of making a contact information entity available across the network is, with all due respect, not understood by Appellants. Similarly, the relevance of Fig. 6, which shows a flowchart of how the agent skills table is updated, is not understood insofar as it is alleged to disclose generating a contact information entity accessible across the network.

*3<sup>rd</sup> Argument:*

As pointed out in the response filed on August 27, 2008, Claim 1 requires the step of:

- b) assessing one or more bids issued by one or more nodes to determine a bid to be used in assigning the contact; and

As stated in the response dated August 27, 2008:

“Benjamin's contacts are compared to a table of agent skills to evaluate, based on an unspecified algorithm, which agent is best suited to handle the contact. There is no disclosure of receiving bids issued by nodes across a network, or of assessing the bids to determine a bid to be used in assigning the contact.

A table of agent information is not a bid received from a node across a network generated in response to a contact information entity having been made available.

In fact, Benjamin is a rules based system of precisely the kind described in the background section of the specification of the present application."

Appellants respectfully submit that the Application is clear in its use of the term "bid". It is stated at page 3, lines 6-7 of Appellants' Application that the method of claim 1 *"enables contacts to be auctioned by one node to another node to better service the contact"*.

The Application further states at page 4, lines 8-11: *"A contact can be placed for auction and the auctioning node simply assesses the bids received. It need not have knowledge of which nodes are currently active and nor need it obtain confirmation from each node that it has placed a bid."*

The term "auction" is similarly used at other points throughout the application, so there can be absolutely no doubt that the term "bid" has its normal meaning and usage: it means an offer, usually one which competes with other offers in the context of an auction.

However, in the Advisory Action dated September 12, 2008, the following argument appeared, in relation to this feature (b) of claim 1:

"Benjamin discloses per Col 4 lines 1-17, "...[Appellants have omitted the full quotation of this passage for brevity]...". The number of 'available agent' in a call center broadly reads on claim limitations "the one or more bids issued by one or more nodes to determine a bid to be used in assigning the contact"."

The omitted passage from col. 4 of Benjamin described how an ordered list of agents is maintained, with contacts being assigned against this list, with unavailable agents being removed from that list or ignored.

Benjamin is silent as regards bids, auctions, offers, or indeed any other paraphrasal of a method of one node signalling its availability and willingness to handle a contact advertised across the network.

Appellants have diligently tried to understand how the term “bids issued by one or more nodes” can be considered to be equated to the number of available agents in listing of agents for a single node, but have again failed to understand this argument. It is submitted that the Examiner is simply wrong.

*4<sup>th</sup> argument*

Claim 1 further contains the feature:

- c) on the basis of said determination, assigning said contact to the node which issued said bid.

This argument is largely based on the same points as the 3<sup>rd</sup> argument above. Benjamin makes no use of any system of bids, least of all to assign a contact to a node (bearing in mind the meaning of “node” within claim 1) which issued a particular bid across the network.

In the Advisory Action of September 12, 2008, the Examiner rebutted Appellants' argument as follows:

“Benjamin discloses per Col. 7, lines 26-36, “[again, the passage is omitted; suffice to say that it discloses steps 202 to 212 of Fig. 6, relating to the conversion of raw agent status information into numerical values suitable for use in a table of agent information] ...” [U]tilizing a skills table to made said determination, as recited in the claim language “on basis of said determination, assigning the contact to the node which issued said bid”.”

Appellants disagree that matching a contact's properties against a table listing agent skills within a contact center, is of any relevance to the claimed feature

of assigning a contact across a network to a node which issued a bid to handle the contact, based on a determination as to which bid was to be used.

### *Summary*

In summary, for the reasons given in relation to each of the four arguments made above, Appellants submit that Benjamin does not disclose the features of claim 1. The same arguments can be made in relation to independent claims 37, 39 and 41, and to claims 3-18 which depend from claim 1. The Examiner should be reversed in relation to these claims.

### (b) Claims 19, 38 & 42

While Appellants strongly argue that these claims cannot stand or fall with claim 1 when Benjamin is the primary reference, it is nevertheless the case that, insofar as Benjamin is considered relevant to these claims, the shortcomings argued above in relation to claim 1 apply *a fortiori* to claims 19, 38 and 42.

The point is made in the 1<sup>st</sup> argument relating to claim 1 that Benjamin fails to disclose the distribution of contacts across a network of nodes equipped to handle such contacts. Claims 19, 38 and 42 define the operation and structure of a node or contact center which bids for a contact and receives the contact from a remote node when the bid is successful. Clearly, the 1<sup>st</sup> argument relating to claim 1 has even more force in this instance.

Similarly the 2<sup>nd</sup> argument related to the generation and making available of the contact information entity. Claims 19, 38 and 42 define the receipt of such contact information via the network, and Benjamin is necessarily silent on this point also.

The 3<sup>rd</sup> and 4<sup>th</sup> arguments relating to claim 1 were concerned with the impropriety of equating bids with tables of agent information which could never be understood as being "bids" in the sense in which the word is normally used (and in which it is used in the Application). Claim 19 explicitly

requires the step of issuing a bid to the contact source offering to service the contact and the further step of receiving the contact in the event that the bid is successful. Being silent on the concept of auctions, bids, offers etc., Benjamin cannot anticipate claim 19 for this reason also.

The Final Office Action failed to provide any argument specific to the subject matter of claims 19, 38 and 42. The difficulties in treating these claims in common with claim 1 were respectfully pointed out in the Response dated August 27, 2008, but this point was not addressed and remains unanswered. Appellants submit that for this reason, it is not even possible to identify even a prima facie argument in support of the rejection of claims 19, 38 and 42.

(c) Claim 34

Claim 34, like claim 1, relates primarily to the steps carried out in the distributing contact center (i.e. the one which receives and distributes the contact). It explicitly requires certain features relevant to the distribution of contacts "across a network having a plurality of connected contact centers", and as pointed out earlier, Benjamin does not disclose any network of connected contact centers.

Claim 34, unlike claim 1, includes the feature of "publishing information relating to the contact over the network". Benjamin is equally silent on this feature.

Claim 34 further requires "awaiting one or more bids from remote contact centers offering to service the contact". Apart from the inherent difficulties with the arguments made by the Examiner equating bids with agent numbers or agent skills tables, it is abundantly clear that such arguments cannot cover "bids from remote contact centers offering to service the contact" as required by claim 34.

Claim 34 requires "determining from said bids a destination for the contact" and "forwarding the contact to said destination". From the wording of the



claim, the destination in claim 34 must be a "remote contact center", and nothing in Benjamin suggests either of these features where the destination is a remote contact center.

(d) Claim 40

Claim 40 explicitly claims a network of contact centers. Benjamin does not disclose, at any point, a network of contact centers. Claim 40 is not anticipated by Benjamin for this basic reason alone.

Furthermore, the contact centers of claim 40 include at least one center which is defined in identical terms to that of independent claim 39. Accordingly, the arguments made in relation to independent claims 1, 37, 39 and 41 apply with equal force to claim 40.

(e) Claim 43

The argument used in the rejection of claim 1 is indicated to apply equally to the data carrier of claim 43. For the reasons argued in relation to the grouping of claims, Appellants disagree that this is an appropriate rejection.

The original argument rejecting claim 1 did not identify where the contact information entity was specifically alleged to be disclosed, and thus the features of claim 43 cannot be matched against the original rejection to assist in understanding how the Benjamin reference might be considered relevant to claim 43.

Accordingly, Appellants can do no more than point out that Benjamin is entirely silent as regards any computer software object encoding contact information and comprising:

- a) information identifying a node which controls the contact;
- b) information identifying one or more characteristics of the contact, whereby said contact may be matched with an agent of a contact center having identified skills to service said contact; and

c) information identifying one or more parameters for which bids are sought by said node, such that a different node may bid to have control of the contact transferred to it.

#### The rejections made against the dependent claims

The arguments made above in relation to claims 1 and 19 apply equally to the claims which depend from each of these independent claims. However, Appellants would also argue in respect of individual dependent claims as follows:

#### Dependent claims 3 and 20

The Final Office Action dated May 1, 2008 alleged the features of claims 3 and 20 to be disclosed by Benjamin at col. 2, line 64 to col. 3, line 9. The passage in question merely states that the system 10 can be distributed using a network. There is no disclosure of a contact information entity which is a software object generated in a network accessible space.

#### Dependent claims 4 and 21

The Final Office Action dated May 1, 2008 alleged the features of claims 4 and 21 to be disclosed by Benjamin at col. 3, lines 28-42. The passage in question states that a memory 28 stores a skills table, and carries on by describing various types of memory. There is no disclosure or suggestion that a network accessible space for storing a contact information entity should be a shared memory space, optionally implemented using JavaSpaces™ technology.

#### Dependent claims 5 and 22

The Final Office Action dated May 1, 2008 alleged the features of claims 5 and 22 to be disclosed by Benjamin at col. 3, lines 29-42. The passage in question states that a memory 28 stores a skills table, and carries on by describing various types of memory. However, there was no indication given as to how this passage disclosed that the step of generating the contact information entity further comprises replicating said object in a plurality of said shared memory spaces.

#### Dependent claims 6 and 26

The Final Office Action dated May 1, 2008 alleged the features of claims 6 and 26 to be disclosed by Benjamin at col. 7, lines 26-46. The passage in question is concerned with updating a skills table, i.e. a table of service agent skills (see col. 7, lines 1-4 and lines 40-44), and makes no suggestion of a contact information entity in the form of an entry in a database accessible across a network.

#### Dependent claims 7 and 27

The Final Office Action dated May 1, 2008 alleged the features of claims 7 and 27 to be disclosed by Benjamin at col. 4, lines 1-17. The passage in question discloses that a service agent station is selected from a service agent table, ignoring or eliminating any unavailable agents. As discussed at length previously, there is no mention of a bidding system, and in particular there is no mention that a bid is issued by the node and transmitted directly to a resource on the network which is responsible for assessing the one or more bids.

#### Dependent claims 8 and 28

The Final Office Action dated May 1, 2008 alleged the features of claims 8 and 28 to be disclosed by Benjamin at col. 1, lines 35-47, col. 7, lines 1-25 and Figure 5. None of these passages makes any mention of bids being issued by the node to an area of the network which is accessible by a resource on the network which is responsible for assessing the one or more bids.

#### Dependent claims 10 and 30

The Final Office Action dated May 1, 2008 alleged the features of claims 10 and 30 to be disclosed by Benjamin at col. 3, line 55 to col. 4 line 17. The passage in question discloses matching contacts against an agent skills table, but makes no mention of a contact information entity in which the contact information made accessible across the network identifies at least one parameter according to which bids will be assessed.

#### Dependent claims 12-15, 32 and 33

The Final Office Action dated May 1, 2008 alleged the features of claims 12 and 32 to be disclosed by Benjamin at col. 1, lines 48-57, col. 3, line 58-67 and col. 4, lines 1-17, apparently because of the mention of "arithmetic algorithm". It is respectfully submitted that mere mention of an arithmetic algorithm (which matches numerical values assigned to skills between contacts and agents) in no way discloses or suggests the feature that said contact information entity (for which it will be recalled it is unclear what is alleged to read onto this entity in the first place) is a software entity which includes a set of rules according to which a bid score is returned by the contact information entity upon receipt of one or more bid values. In other words, the entity must be capable of conveying information about the contact, and receiving and evaluating bids according to included rules.

For similar reasons, the logical and functional features of the contact information entity as defined in claims 13-15 and 33 are nowhere suggested in Benjamin.

#### Dependent claims 16 and 17

The Final Office Action dated May 1, 2008 alleged the features of claim 16 to be disclosed by Benjamin at col. 4, lines 1-17, on the same basis as that in which bids were considered (in the rejection of claim 1) to be the same as the agent skill entries in a table. It is respectfully submitted that the steps of claim 16 are nowhere suggested in Benjamin, in particular as regards maintaining a winning bid and evaluating this against newly arriving bids from other nodes across the network. As regards claim 17, Benjamin is entirely silent on a timeout period and no assistance is given in the rejection as to how the features of this claim are supposed to be disclosed in the cited passage.

#### Dependent claim 18

The Final Office Action dated May 1, 2008 alleged the features of claim 18 to be disclosed by Benjamin at col. 3, lines 55-67. That passage discusses a server using an algorithm to match a communication session profile with a

skills table. Claim 18, in contrast, requires one of the nodes mentioned in claim 1 to be a computer of a user who can make a determination as to whether or not he or she has the skills to service a contact and issue a bid. Appellants respectfully submit that they simply do not understand the relevance of the cited passage to the claim language.

#### Dependent claim 35

This claim requires a node to be a remote contact center which issued a bid. It was rejected based on col. 5, lines 20-33 – a passage which discusses how customers of the contact center can provide feedback on their interaction with an agent's skills. Again, Appellants respectfully submit that they simply do not understand the relevance of the cited passage to the claim language.

### **2) Rejection under 35 U.S.C. 103 over Benjamin in view of Klein.**

#### Claims 11 and 31

The rejection is based on the assumption that Benjamin discloses a method as claimed in claim 11 wherein the at least one parameter is selected from a skillset proficiency metric. Appellants respectfully traverse that underlying assumption for the reasons argued above in relation to claims 1 and 10.

It is submitted that claim 11, which necessarily includes the features of both claims 1 and 10, is clearly distinguished over Benjamin for all of the reasons argued previously, and thus the combination with Klein is moot, given that Klein fails to remedy the deficiencies of Benjamin as regards claims 1 and 10.

### **3) Rejection under 35 U.S.C. 103 over Benjamin in view of Rowstron.**

#### Claims 23-25

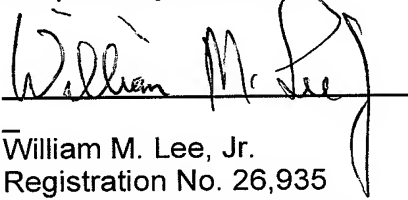
The rejection is based on the assumption that Benjamin discloses a method as claimed in claim 22, on which claims 23-25 directly or indirectly depend. Appellants respectfully traverse that underlying assumption for the reasons argued above in relation to claims 19, 20 and 22.

It is submitted that claims 19, 20 and 22, all of whose features are required in each of claims 23-25, are already clearly distinguished over Benjamin for all of the reasons argued previously, and thus the combination with Rowstron is moot, insofar as Rowstron fails to remedy the deficiencies of Benjamin as regards claims 19, 20 and 22.

Therefore, it is submitted that the Examiner's rejections are clearly in error, and should be reversed.

December 23, 2008

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "William M. Lee, Jr.", is written over a horizontal line.

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## CLAIMS APPENDIX

1. A method of distributing a contact across a network having a number of nodes which are equipped to service contacts, comprising the steps of:
  - a) generating a contact information entity which is accessible across the network and which comprises information sufficient to enable each node to determine whether it has the resources to service the contact, one or more of said nodes being a contact center having a plurality of agents for servicing contacts, each agent having identified skills, whereby said contact center can determine whether its agents can service a given contact, based on said contact information entity and the identified skills of the contact center's agents;
  - b) assessing one or more bids issued by one or more nodes to determine a bid to be used in assigning the contact; and
  - c) on the basis of said determination, assigning said contact to the node which issued said bid.
2. (Cancelled)
3. A method as claimed in claim 1, wherein said contact information entity is a software object generated in a network accessible space.
4. A method as claimed in claim 3, wherein said network accessible space is a shared memory space, optionally implemented using JavaSpaces (TM) technology.
5. A method as claimed in claim 3, wherein the step of generating said contact information entity further comprises replicating said object in a plurality of said shared memory spaces.
6. A method as claimed in claim 1, wherein said contact information entity is an entry in a database accessible across a network.

7. A method as claimed in claim 1, wherein said bids are issued by the nodes and transmitted directly to a resource on the network which is responsible for assessing the one or more bids.
8. A method as claimed in claim 1, wherein said bids are issued by the nodes to an area of the network which is accessible by a resource on the network which is responsible for assessing the one or more bids.
9. A method as claimed in claim 1, wherein said contact information entity identifies at least one skillset required to service the contact.
10. A method as claimed in claim 1, wherein said contact information entity identifies at least one parameter according to which bids will be assessed.
11. A method as claimed in claim 10, wherein said at least one parameter is selected from a cost metric, a skillset proficiency metric, and a metric identifying the time within which the contact is to be serviced.
12. A method as claimed in claim 1, wherein said contact information entity is a software entity which includes a set of rules according to which a bid score is returned by the contact information entity upon receipt of one or more bid values.
13. A method as claimed in claim 12, wherein said step of assessing one or more bids comprises evaluating the bid scores returned by the contact information entity.
14. A method as claimed in claim 1, wherein said contact information entity is a software entity which includes executable logic according to which a bid score is returned by the contact information entity upon receipt of one or more bid values.
15. A method as claimed in claim 14, wherein the executable logic is provided as an object oriented command pattern.



16. A method as claimed in claim 1, wherein said step of assessing one or more bids comprises maintaining a single winning bid, evaluating each new bid as it issues from a node and either discarding the new bid if it is determined to be inferior to the winning bid according to predetermined criteria or substituting it as the new winning bid if it is determined to be better than the previous winning bid.

17. A method as claimed in claim 16, wherein said step of assessing one or more bids comprises collecting all bids which issue within a timeout period and determining which of these bids is to be used in assigning the contact.

18. A method as claimed in claim 1, wherein one or more of said nodes is a computer of a user connected to the network, whereby said user may make a determination as to whether he or she has the skills to service said contact and as to whether or not to issue a bid.

19. A method of obtaining contacts across a network from a contact source, comprising the steps, carried out by a contact center having a plurality of agents for servicing contacts, each agent having identified skills, of:

- a) receiving via the network contact information which comprises information sufficient to enable said contact center to determine whether it has the resources to service the contact;
- b) issuing a bid to the contact source offering to service the contact based on said information; and
- c) in the event that the bid is successful, receiving the contact from the contact source.

20. A method as claimed in claim 19, wherein said contact information is provided in a software object generated in a network accessible space.

21. A method as claimed in claim 19, wherein said network accessible space is a shared memory space, optionally implemented using JavaSpaces (TM) technology.

22. A method as claimed in claim 20, wherein the step of generating said contact information entity further comprises replicating said object in a plurality of said shared memory spaces.
23. A method as claimed in claim 22, wherein said contact information entity is a JavaSpace entry and the step of receiving the contact information comprises reading said entries from a JavaSpace.
24. A method as claimed in claim 23, wherein the step of issuing a bid comprises modifying said entry and writing the modified entry in a JavaSpace.
25. A method as claimed in claim 23, wherein the step of issuing a bid comprises generating a new entry including a reference which relates the new entry to the original contact information entity, and writing the new entry to a JavaSpace.
26. A method as claimed in claim 19, wherein said contact information entity is an entry in a database accessible across a network.
27. A method as claimed in claim 19, wherein said bid is issued by the node and transmitted directly to a resource on the network which is responsible for assessing the one or more bids.
28. A method as claimed in claim 19, wherein said bid is issued by the node to an area of the network which is accessible by a resource on the network which is responsible for assessing the one or more bids.
29. A method as claimed in claim 19, wherein said contact information identifies at least one skillset required to service the contact.
30. A method as claimed in claim 19, wherein said contact information identifies at least one parameter according to which bids will be assessed.

31. A method as claimed in claim 30, wherein said at least one parameter is selected from a cost metric, a skillset proficiency metric, and a metric identifying the time within which the contact is to be serviced.

32. A method as claimed in claim 19, wherein said contact information is provided in a software entity which includes a set of rules according to which a bid score is returned by the software entity upon receipt of one or more bid values.

33. A method as claimed in claim 19, wherein said contact information entity is a software entity which includes executable logic according to which a bid score is returned by the contact information entity upon receipt of one or more bid values.

34. A method of distributing contacts across a network having a plurality of connected contact centres, each contact center having a plurality of agents for servicing contacts, each agent having identified skills, comprising the steps of:

- a) upon receipt of a contact by a contact centre, publishing information relating to the contact over the network;
- b) awaiting one or more bids from remote contact centres offering to service the contact;
- c) determining from said bids a destination for the contact; and
- d) forwarding the contact to said destination.

35. A method as claimed in claim 34, wherein said destination is a remote contact centre which issued one or more of said bids.

36. A method as claimed in claim 34, wherein said destination is a local contact queue of the contact centre which received the contact.

37. An apparatus for distributing a contact across a network having a number of nodes which are equipped to service contacts, comprising:

- a) a contact information generator for generating a contact information entity which is accessible across the network and which comprises

information sufficient to enable each node to determine whether it has the resources to service the contact, one or more of said nodes being a contact center having a plurality of agents for servicing contacts, each agent having identified skills, whereby said contact center can determine whether its agents can service a given contact, based on said contact information entity and the identified skills of the contact center's agents;

b) a bid assessment module for assessing one or more bids issued by one or more nodes to determine a bid to be used in assigning the contact; and

c) contact assignment means for, on the basis of said determination, assigning said contact to the node which issued said bid.

38. An apparatus for obtaining contacts across a network from a contact source, comprising:

a) a network connection for receiving via the network contact information;

b) an evaluation module for evaluating said contact information to determine whether a node associated with said apparatus has the resources to service the contact, said node being a contact center having a plurality of agents for servicing contacts, each agent having identified skills, whereby said evaluation module can determine whether the agents of the contact center can service said contact, based on said contact information entity and the identified skills of the contact center's agents; and

c) a bid generation unit for issuing a bid to the contact source offering to service the contact based on said information.

39. A contact centre comprising:

a) a network connection for distributing contacts to one or more other contact centres;

b) a contact manager for controlling contacts received at the contact centre from one or more communications networks and distributing said contacts among a plurality of agents based on the requirements of the contact and identified skills of the agents;

c) a contact information generator for generating a contact information entity which is accessible across the network and which comprises information sufficient to enable each node to determine whether it has the resources to service a contact;

d) a bid assessment module for assessing one or more bids issued by one or more nodes to determine a bid to be used in assigning the contact; and

e) contact assignment means for, on the basis of said determination, assigning said contact to the node which issued said bid.

40. A network having a plurality of connected contact centres, wherein at least one of said contact centres comprises:

a) a network connection for distributing contacts to one or more other contact centres;

b) a contact manager for controlling contacts received at the contact centre from one or more communications networks and distributing said contacts among a plurality of agents based on the requirements of the contact and identified skills of the agents;

c) a contact information generator for generating a contact information entity which is accessible across the network and which comprises information sufficient to enable each node to determine whether it has the resources to service a contact;

d) a bid assessment module for assessing one or more bids issued by one or more nodes to determine a bid to be used in assigning the contact; and

e) contact assignment means for, on the basis of said determination, assigning said contact to the node which issued said bid.

41. A computer program product comprising instructions in machine readable form which when executed by a computer associated with a contact centre are effective to cause said computer to:

a) generate a contact information entity which is accessible across the network and which comprises information sufficient to enable each of a plurality of nodes to determine whether it has the resources to service the contact, one or more of said nodes being a contact center having a plurality of agents for servicing contacts, each agent having

identified skills, whereby said contact center can determine whether its agents can service a given contact, based on said contact information entity and the identified skills of the contact center's agents;

- b) assess one or more bids issued by one or more nodes to determine a bid to be used in assigning the contact; and
- c) on the basis of said determination, assign said contact to the node which issued said bid.

42. A computer program product comprising instructions in machine readable form which when executed by a computer associated with a contact centre are effective to cause said computer to:

- a) receive via the network contact information which comprises information sufficient to enable a node to determine whether it has the resources to service the contact, said node being a contact center having a plurality of agents for servicing contacts, each agent having identified skills, whereby said evaluation module can determine whether the agents of the contact center can service said contact, based on said contact information entity and the identified skills of the contact center's agents;
- b) issue a bid to the contact source offering to service the contact based on said information; and
- c) in the event that the bid is successful, receive the contact from the contact source.

43. A data carrier encoded with a machine-readable computer software object, said computer software object encoding contact information and comprising:

- a) information identifying a node which controls the contact;
- b) information identifying one or more characteristics of the contact, whereby said contact may be matched with an agent of a contact center having identified skills to service said contact; and
- c) information identifying one or more parameters for which bids are sought by said node, such that a different node may bid to have control of the contact transferred to it.

## EVIDENCE APPENDIX

None

## RELATED PROCEEDINGS APPENDIX

None